

# MATH 104, HOMEWORK #12

## DUE THURSDAY, APRIL 28

This is the last graded HW of the semester. Remember, consult the Homework Guidelines for general instructions. Results from class, our textbook, and graded homework are fair game to use unless otherwise specified. You may also use ungraded homework results from previous problem sets.

### GRADED HOMEWORK:

1. Ross, Exercise 33.6. Then write an actual proof of Theorem 33.5 from p. 284. (You can use the book's outline, but fill in the details. You may also find that things are clearer if you reorganize the argument a bit.)
2. Ross, Exercise 33.7 and 33.8. (Both part of 33.8 should be quick corollaries once you have done the earlier bits.)
3. Ross, Exercise 34.6. (Most likely you will need to use the Chain Rule. Be sure you check you meet the conditions to do so.)

### UNGRADED HOMEWORK:

Pay special attention to starred problems; they are usually classics we will use many times, often important theorems hidden in the exercises.

Section	Exercises
33	1, 2*, 4, 9, 10, 13, 15ab
34	1, 2, 3, 5, 11, 12